

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
9 August 2001 (09.08.2001)

PCT

(10) International Publication Number
WO 01/56981 A1(51) International Patent Classification: C07C 401/00,
A61K 31/593, A61P 19/10

(21) International Application Number: PCT/DK01/00069

(22) International Filing Date: 31 January 2001 (31.01.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/179,426 31 January 2000 (31.01.2000) US(71) Applicant (for all designated States except US):
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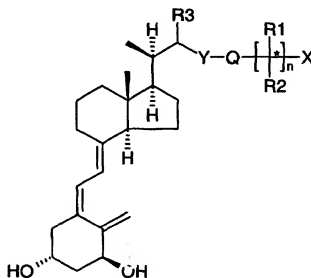
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AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KR, KP, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.(84) Designated States (regional): (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: USE OF VITAMIN D-DERIVATIVES IN THE TREATMENT OF OSTEOPOROSIS AND RELATED BONE DISOR-
DERS, AS WELL AS NOVEL VITAMIN D3-DERIVATIVES

(I)

(57) Abstract: Compounds of the formula (I) wherein X represents hydrogen or hydroxy; Y represents oxygen or sulphur or oxidized sulphur selected from the groups S(O) and S(O)₂; R¹ and R², which may be the same or different, represent hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated, C₁-C₈-hydrocarbon; or R¹ and R², together with the carbon atom to which they are attached (marked with an asterisk in formula (I)), bearing the group X, form a C₃-C₈ carbocyclic ring; Q represents a diradical residue after removal of 2 hydrogen atoms from a straight, branched or cyclic, saturated or unsaturated C₁-C₈-hydrocarbon; R³ represents hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated C₁-C₈-hydrocarbon; R¹, R² and/or Q is optionally substituted with one or more deuterium or fluorine atoms; and n is 0 or 1; and derivatives of the compounds of formula

(I) in which one or more hydroxy groups have been transformed into -O-acyl or -O-glycosyl groups, or a phosphate ester, such masked groups being hydrolyzable in vivo; may be used for the preparation of a medicament for the treatment and/or prophylaxis of osteoporosis and related bone disorders.

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